UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,644	04/23/2001	David de Andrade	40004572-0005-002	6427

26263 7590 06/11/2008

SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	PAPER NUMBER
2623	
MAIL DATE	DELIVERY MODE
06/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/841,644	ANDRADE ET AL.	
	Examiner	Art Unit	
	DOMINIC D. SALTARELLI	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8,10,11,13-16,18,20 and 39-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8,10,11,13-16,18,20 and 39-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 20, 2008 have been fully considered but they are not persuasive.

Applicant argues that the Kikinis reference does not teach the amended claim limitations of recognizing patterns using a pattern recognition engine and accessing a repository storing attributes concerning interactive TV triggers to be inserted in to the broadcast data stream and determining whether a pattern recognized by the pattern engine is to be associated with a one of the interactive TV triggers, because Kikinis is silent when it comes to describing how elements within the various frames that are to be associated with URL links are actually identified (applicant's remarks, page 6).

In response, the amended claim limitations are in fact inherent features of the Kikinis reference. Column 10, lines 56-67, state that the system which performs the URL insertion does so automatically, as a real time insertion necessarily removes the involvement of a human operator, as a human operator would not be able to manually identify objects in a video stream and perform the association fast enough to achieve the "minimum delay" called for in Kikinis, who states that said operations are performed by an "image and data processing apparatus". This apparatus is stated as needing both a means to identify an object or person in a video stream with which to associate a URL and a means for making said association with the appropriate URL at the required speed to

process then deliver said content with minimum delay. These necessary means can be nothing other than a pattern recognition engine, as claimed, as the only alternative would be a human operator making manual designations on a frame by frame basis, which is specifically excluded, and accessing a repository of stored attributes which instructs the apparatus as far as which URLs are to be associated with which objects.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 39 and 40 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Currently, in order to render a computer program product patentable, it must be clearly claimed to be encoded upon a computer readable medium. Applicant is advised to amend claim 39 to read "A computer readable medium encoded with instructions..." Further, the specification is vague regarding the nature of what constitutes a “machine readable medium. See paragraph 0034 of the originally filed specification, wherein a machine readable medium is described as a device that transmits information, and the information stored thereon is represented by a carrier wave, which could arguable entail the machine readable medium to include a signal, *per se*, which is not statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5, 6, 8, 11, 15, 16, 18, and 39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikinis (5,929,849, of record).

Regarding claims 1, 11, and 39, Kikinis discloses, in an interactive television (TV) environment, a method and system comprising recognizing patterns, using a pattern engine, in an unmodified broadcast data stream, accessing a repository storing attributes concerning interactive TV trigger to be inserted into the broadcast data stream and determining whether a pattern recognized by the pattern engine is to be associated with a one of the interactive TV triggers, and if so, then prior to broadcasting, automatically inserting an interactive TV trigger determined to be associated with a recognized pattern into the broadcast data stream (col. 10, lines 18-67).

Regarding claim 2, Kikinis discloses the method of claim 1, further comprising pre-inserting the interactive TV trigger into any stored content that will constitute the broadcast data stream (col. 10, lines 6-17).

Regarding claims 5, 6, 15, 16, 41, and 42 Kikinis discloses the method of claims 1, 2, and 11 wherein the [media] patterns include video and text elements (col. 10, lines 46-55).

Regarding claims 8 and 18, Kikinis discloses the method and system of claims 1 and 11, further comprising delivering the broadcast data stream with the inserted interactive TV trigger to one or more receivers for display (set top box 11, col. 5, lines 27-33).

Regarding claim 40, Kikinis discloses the medium of claim 39, further comprising passing the broadcast data stream to one or more receivers without inserting any interactive elements if the media pattern recognized by the pattern engine is not to be associated with any interactive elements (all video is broadcast regardless of whether a URL has been associated or not, col. 7, lines 28-37).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3, 4, 13, and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Portuesi (5,774,666, of record).

Regarding claims 3, 4, 13, and 14, Kikinis discloses the method and system of claims 2 and 11, but fails to disclose the patterns include voice and other audio.

In an analogous art, Portuesi discloses a method and system for inserting interactive elements into a broadcast stream, wherein voice and other audio content are recognized and associated with an interactive element (col. 5, lines 5-12).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method and system of Kikinis to include associating the interactive elements with voice and other audio, as taught by Portuesi, for the benefit of broadening the applicability of method and system taught by Kikinis so that an advantageously wider variety of content may be associated with interactive elements.

7. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis.

Regarding claims 10 and 20, Kikinis discloses the methods and system of claims 1 and 11, but fails to discloses the interactive TV trigger includes an Advanced Television Enhancement Forum (ATVEF) trigger.

It is notoriously well known in the art to enhance television broadcasts using standardized ATVEF triggers.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method and system disclosed by Kikinis to include ATVEF triggers, for the benefit of using a standardized means of content enhancement that is specifically for broadcast programming.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIC D. SALTARELLI whose telephone number is

(571)272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dominic D Saltarelli/
Examiner, Art Unit 2623

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2623